The Restriction is to a Generic Claim and Not a Markush Group

In Groups I-V (and Groups XI-XV and XX1-XXV), the Examiner restricted among different possible values for R^3. As justification for this restriction, the Examiner cited the standard for restriction of a Markush Group:

> 3. The Markush group set forth in the claims includes both independent and distinct invention, and patentably distinct compounds (or species) within each invention. (Paragraph 3)
>
> 4. In accordance with the decisions in ***In re Harnisch***, 631 F.2d 716, 206 USPQ 300 (CCPA 1980); and ***Ex Parte Hozumi***, 3 USPQ2d 1059 (Bd. Pat. App. & Int. 1984), restriction of a Markush group is proper ... (Paragraph 4)
>
> 9 The Inventions of Groups I-V are related as mutually exclusive species in the Markush group of formula (I). (Paragraph 9)

However, ***R^3 is not defined as a Markush Group.*** Rather, R^3 is defined in terms of a generic value, namely R^3 is a tertiary amine. Therefore, the Examiner has used the wrong standard to justify the restriction requirement.

Thus, Claim 1 is a generic claim. The proper standard for restriction of a generic claim is set forth in MPEP 809.02 and 809.02(a). MPEP 809.02 quotes 37 CFR § 1.146:

> In the first action on an application containing a generic claim to a generic invention (genus) and claims to more than one patentably distinct species embraced thereby, the examiner may require the applicant in the reply to that action to elect a species of his or her invention to which his or her claim will be restricted if no claim to the genus is found to be allowable. However, if such application contains claims directed to more than a reasonable number of species, the examiner may require restriction of the claims to not more than a reasonable number of species before taking further action in the application.

Therefore, restriction of a generic claim is improper unless the Examiner can show that the claims are directed to more than a reasonable number of species. By having already examined the ***entire*** claimed subject matter in prior office actions (mailed February 12, 2003, and October 9, 2003), it is clear that the claimed subject matter is not directed to more than a reasonable number of species. For this reason alone, the Restriction Requirement should be withdrawn.

Applicant's Prior Amendments Have Not Increased The Examiner's Search Burden

The Examiner appears to believe that the amendments made to the claims in the Paper filed April 12, 2004, (hereinafter the "Prior Amendments") justifies the Restriction Requirement:

> In view of Applicants' broad scope, vast number of compounds claimed, cancellation of some of the original claims, and introduction of new claims, the Examiner places the following Restriction Requirement on the instant claims.

The Examiner complains about the large number of compounds claimed. However, as noted above, she has already examined the claimed subject matter and ***issued two prior office actions!!*** The Examiner has not demonstrated that the Prior Amendments increase the search burden or otherwise justify a new restriction at this stage of prosecution. In fact, it will be shown in the discussion below that the Prior Amendments merely correct typographical corrections, clarify language, cancel claims, and add dependent claims. It is not understand how these amendments enlarge the scope of the claimed subject matter or otherwise justify the new restriction requirement.

The Examiner complains in the statement reproduced above about the cancellation of original claims. Surely, the cancellation of claims cannot justify a new restriction requirement at any time, particularly after two substantative office actions.

The Examiner also complains about new claims. However, all of the new claims are dependent claims that merely further limit the subject matter of original claims that have already been examined. For example, new Claims 32, 33 and 34 were added which depend from original Claims 8, 20 and 28, respectively. Original Claims 8, 20, and 28 are directed to the treatment of a viral or microbial infection. New dependent Claims 32-34 are directed to the treatment of specific infections, i.e., infections due to E. Coli, influenza A, or a verotoxin-producing organism. Similarly, new dependent Claims 35 and 36 were also added in the Prior Amendments and further limit the subject matter of the claims on which they depend, original Claims 3 and 14. Surely, presenting new dependent claims that further limit the subject matter of original claims that have already been examined in two prior office actions does not justify a new restriction.

A number of claims were amended to incorporate the limitations of dependent claims. For example, Claims 26-30 were amended to include the limitations of Claim 24. Other claims were amended for clarifying purposes. For example, in Claims 1 and 12, the phrase "R^4 is a group that is selectively hydrolyzed in a target cell" was amended to recite "R^4 is an *in vivo* hydrolyzable group"; and in Claim 12 the phrase "R^6 is a group that is selectively hydrolyzed in a target cell" was amended to "R^6 is an *in vivo* hydrolyzable group". Clarifying amendments of a similar nature were made to Claims 6, 18, and 26; 8, 20, and 28; 9, 10, 21, 22, 29, and 30; and 24. Clearly, these amendments do not change the Examiner's search burden or otherwise justify a new restriction.

Because the scope of the claimed subject matter is substantially the same as that already examined and searched by this Examiner, there is no additional search burden provided by any of Applicants Prior Amendments. If the Examiner believes any of the Prior Amendments requires additional searching or otherwise justify a new restriction, Applicants respectfully request the Examiner to identify the amendment and provide detailed reasons why the amendment adds any search burden.

The Restriction is Burdensome and Contrary to the Policy of Compact Prosecution

The M.P.E.P., § 2106 (II) states the U.S.P.T.O. principles of compact prosecution:

> It is essential that patent applicants obtain a prompt yet complete examination of their applications. Under the principles of compact prosecution, each claim should be reviewed for compliance with every statutory requirement for patentability in the initial review of the application, even if one or more claims are found to be deficient with respect to some statutory requirement. Thus, Office personnel should state all reasons and bases for rejecting claims in the first Office action. Deficiencies should be explained clearly, particularly when they serve as a basis for a rejection. Whenever practicable, Office personnel should indicate how rejections may be overcome and how problems may be resolved. A failure to follow this approach can lead to unnecessary delays in the prosecution of the application.

After having issued two prior substantive office actions, the Examiner only now issues a restriction requirement. The scope of the subject matter claimed is substantially unchanged by the Prior Amendments. By restricting this previously examined subject matter at this stage of

prosecution into ***thirty three separate Groups***, the Examiner has unnecessarily delayed the prosecution of this application and has presented Applicants with an extremely burdensome restriction. The Examiner is respectfully requested to adhere to the U.S.P.T.O. principles of compact prosecution by withdrawing the Restriction Requirement.

Summation

Issuing a restriction requirement after having already issued two substantive office action is contrary to the U.S.P.T.O. policy of compact prosecution. The Prior Amendments do not substantially changed the scope of the claimed subject matter. Therefore, there is no additional burden in continuing to examining all of the claimed subject matter. Moreover, the Examiner has improperly restricted a generic claim by restricting among possible values for the variable R^3, which is defined generically as a "tertiary amine". For these reasons, Applicants respectfully request that the application be searched and examined without restriction.

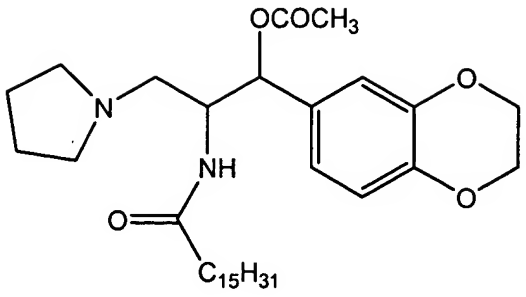
Alternatively, Applicants respectfully request that the Restriction Requirement be replaced with an election of species according to 37 CFR § 1.146, and that the Examiner perform a search using the compound represented by Structural Formula **A** below as the elected species.

If the Examiner chooses to withdraw the restriction with respect to the compound claims (Groups I-V, XI-XV, and XXI-XXV) but retain it with respect to the remaining claims directed to methods of treatment, Applicants will request rejoinder of the method claims when the compound claims are found to be allowable.

Election of Group and Species for Prosecution

Responsive to the Restriction Requirement dated June 30, 2004, the claims of Group I, Claims 2 as well as Claims 1, 3-5, and 35 (in part), drawn to compounds according to Claim 1 where R3 is pyrrolidine are elected for prosecution. Applicant reserves the right to file a continuing application or take such other action to protect the non-elected inventions. Applicant does not hereby abandon or waive any rights in the non-elected inventions.

Responsive to the requirement for an election of species, Applicant hereby elects as the species a compound shown in FIG 1 in the instant application, reproduced herein as Structural Formula **A**:



A .

Claims readable on the elected species are 1, 2, 3, 6-10, 32, and 35.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By _____

Kraig K. Anderson
Registration No. 54,961
Telephone: (978) 341-0036
Facsimile: (978) 341-0136

Concord, MA 01742-9133
Dated: September 21, 2004